MANUFACTURING SUBCONTRACTS MANAGEMENT POLICY

DOCUMENT IDENTIFIER: A-SP-ELMF416-00-0 Rev B, 14-Apr-1989

ABSTRACT: This policy states the general requirements for Digital Equipment Corporation subcontracting, and lists the different operational functions and responsibilities impacting the subcontract decision.

APPLICABILITY: This policy is intended for implementation by all Digital plants and businesses involved in plant product-specific subcontract documents.

STATUS: APPROVED 14-Apr-1989; see EL-INDEX-00 for expiration date.

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Revision History:	Rev A,	12-Nov-1984	
	Rev B,	14-Apr-1989	ECO# CTS01
Document Management Category:	Manufacturing Plant Operations (MPO)		
Responsible Department:	U.S. Manufacturing Product Safety and Regulations		
Responsible Person:	Henry Singer		

APPROVAL: This document has been recommended for approval by the General Review group for its category.

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1 INTRODUCTION

The use of subcontractors to supplement Digital's manufacturing capability has increased dramatically in recent years because of the market demand for Digital products and the need for greater cost effective use of Digital's capital resources.

To properly manage the subcontracting function and to avoid fragmentation, it is important to recognize the need for an integrated and consistent approach to the subcontracting effort.

1.1 PURPOSE

While each plant or business may vary organizationally where subcontracting is performed, there are a number of operating functions within the organization that have direct subcontracting concerns, such as Quality, Finance, Engineering, Manufacturing, and others. This document identifies the subcontracting policy and procedures covering each function's requirements and Digital specifications when using Digital-supplied or specified materials to meet schedules and quality level at an agreed upon cost.

1.2 SCOPE

This policy outlines the procedures in place to manage a subcontracted business. It outlines the charters of the functional departments in support of the contracts, and lists the applicable documents in use. Specific attention is paid to current manufacturing concerns and issues with expectations that other requirements will be added at a later date.

1.3 DEFINITION OF SUBCONTRACTING

Subcontracting is defined as hiring a supplier (internal or external) to assemble, build, control material and, where authorized, test Digital-designed assemblies and products.

1.4 DIFFERENCES AMONG TOTAL SUBCONTRACTS, SUBCONTRACTS, BUYOUTS, AND JOINT DEVELOPMENT AGREEMENTS

A total subcontract exists when the Digital-contracted supplier purchases parts from a vendor listed on the Digital Qualified Vendor List (QVL) to build a product.

Not all supplier-built products are subcontract products. The key question is who designed the product. If the product is Digital-designed, it is a subcontract and this policy applies. if the product is supplier-designed, it is a buyout and is covered by buyout procedures in the *Purchasing Contracts Manual*, Volume III. The Purchasing Department handles buyouts with the assistance of legal counsel.

If Digital and the supplier are working together to design the product, it is neither a buyout nor a subcontract, but a joint development agreement. Joint development agreements often require complex acceptance criteria and lengthy negotiations over rights to the design. Therefore, legal counsel should be consulted early in the agreement preparation.

Every supplier-built product is required to meet the same requirements as a product that is designed and built within Digital.

2 SUBCONTRACTING RESPONSIBILITIES

Digital manufacturing organizations are responsible for negotiating subcontracts for products manufactured by the subcontractor through the Purchasing Department, with the assistance of legal counsel.

Since Digital manufacturing plants are the only groups fully trained and staffed to manage subcontractor relations on an ongoing basis, Digital organizations planning or negotiating a subcontract (see subhead 1.4) shall arrange for a manufacturing partner to oversee the subcontract, measure the contract compliance, and enforce all applicable Digital standards.

Each Digital manufacturing facility that ships products to customers must ensure product serialization to conform with requirements stated in *DEC STD 178-3 Digital Marking Requirements for Completed Products Intended to be Sold* and *DEC STD 031-2 Product Serialization - Site Codes*. Responsibiity for assignment of site codes for subcontractors has been transferred from Manufacturing Product Safety and Regulations to Corporate Product Safety and Regulations.

Members of the subcontracting team include representatives from Purchasing, Materials and Production Control, Manufacturing, Engineering, Finance, Quality, Legal, and, if necessary, New Products. In some countries, such as Japan, the Subcontract Controller is the Project Manager of the subcontracting team, whose main functions are quality, cost, and delivery control.

2.1 SELECTION OF SUBCONTRACTORS

The selection of subcontractors is made by the responsible person(s) in plant management with input by the subcontracting team. Factors taken into consideration are quality, price, delivery, availability of capital equipment, and percentage of Digital business already in place. The subcontracting shall not become a major part of any one subcontractor's business.

2.2 PURCHASING

The Purchasing organization performs the subcontracting management function. They negotiate with suppliers to determine the necessary methods as stated in the Basic Order Agreement (BOA) for acquiring materials to build and assemble products and related services.

2.3 MATERIALS

The organization that ensures material control has the responsibility to include the documentation to move materials to and from the subcontractor to ensure traceability. Refer to *DEC STD 131-0 Traceability Policy*.

2.4 PRODUCTION CONTROL

The plant is responsible to ensure traceability of the controlled parts, segregation of the subcontractor's parts, and ensure implementation of Engineering Change Orders (ECOs).

2.5 MANUFACTURING ENGINEERING

The Manufacturing Engineering organization identifies, provides, and maintains capital equipment and ensures calibration of same. They are also responsible for technical resource and process, accuracy of Bills of Material (BOMs), packaging, implementation of ECOs, process change, and documentation support.

2.6 FINANCE

The Finance organization assists in establishing the subcontract cost by taking into consideration the regulatory agency cost, capital equipment cost, and the audit cost. Finance assesses completion of a Make versus Buy analysis for the product.

2.7 QUALITY

The Quality organization is responsible for the following:

- Incoming and source inspection
- Auditing, per *DEC STD 116-0 Workmanship Standards Manual*
- *EL-MF520-02-0, Manufacturing Systems Assessment Procedure - Checklist for Supplier Certification*
- Process/product certification and evaluation
- Corrective action
- Material Review Board
- Regulatory compliance
- Generating a monthly Quality Report, including UL/CSA inspection audit results

The Quality organization of the subcontracting plant is also responsible for maintaining product documentation, which includes the following:

- Product description
- Product report
- Test data
- Regulatory agency approval
- New parts/components
- List of controlled parts
- Product transfer
- Schedule
- Revision and ECO control

Digital specification, 76-65345-00 through 76-65345-07 *Supplier Quality Survey*, contain the necessary forms, checklists, and procedures to obtain sufficient information to determine whether or not a particular supplier or subcontractor has the potential to provide Digital with a quality product.

2.8 LEGAL

The Law Department assists in preparing and negotiating the subcontract and advises on any legal issues which may arise during the program. All subcontract agreements shall be approved by the Law Department before signing.

3 SAFETY AGENCY REQUIREMENTS

Third party safety certifications are required on subcontracted products and assemblies in order to support Digital's Product Safety Submittal and Certification Policy as detailed in *DEC STD 119-0 Digital Product Safety - Introduction and General Requirements*.

3.1 UNDERWITERS LABORATORIES INC. (UL)

3.1.1 Products and Assemblies

Subcontractors must be listed in the UL Follow-up Services Report as alternate manufacturers for the device/assembly.

3.1.2 Cables and Harnesses

Cable and harness subcontractors must be approved for the manufacture of cables and harnesses for Digital by UL under the UL Subject 764 Cable and Harness Program.

3.2 CANADIAN STANDARDS ASSOCIATION (CSA)

3.2.1 Products and Assemblies

Products and Assemblies manufactured by a subcontractor must be certified by CSA under the Model Certification Program. Submittal for model certification is the responsibility of the subcontracting plant, with Digital identified as the submittor and the subcontractor identified as the manufacturer.

Alternately, the subcontractor may manufacture the product under the auspices of a Category Certified plant. In this situation all inspection and production line safety testing must be performed in the Digital plant.

3.2.2 Cables and Harnesses

Cables and harnesses manufactured by a subcontractor for use at one of Digital's CSA Category Certified manufacturing facilities must be manufactured from CSA Certified Materials. The subcontractor is responsible for maintaining traceability records for the materials. The Digital facility must perform inspection and safety testing of the cables.

3.3 TECHNISCHE UBERWACHUNGS - VEREIN (TUV, TUEV)

3.3.1 Products and Assemblies

Subcontractors must be listed as co-licensees for products and assemblies that bear the GS or BG safety approval marks.

3.3.2 Cables and Harnesses

Cables and harnesses manufactured by subcontractors for use at one of Digital's manufacturing facilities are not subject to any special programs by TUEV at the subcontractor.

REFERENCED DOCUMENTS

DIGITAL STANDARDS

EL-00031-02	*DEC STD 031-2 Product Serialization - Site Codes*
EL-00116-00	*DEC STD 116-0 Workmanship Standards Manual*
EL-00119-00	*DEC STD 119-0 Digital Product Safety - Introduction and General Requirements*
EL-00131-00	*DEC STD 131-0 Traceability Policy*

RELATED DOCUMENTS

EL-00131-01	*DEC STD 131-1 Controlled Components*
EL-00131-02	*DEC STD 131-2 Telecommunications Controlled Components*
EL-00178-00	*DEC STD 178-0 Digital Identification Marking Requirements*
EL-00178-01	*DEC STD 178-1 Digital Marking Requirements for Piece Parts*
EL-00178-02	*DEC STD 178-2 Digital Marking Requirements for Subassemblies: Field Replaceable Units (FRU) and Non-Field Replaceable Units*
EL-00178-03	*DEC STD 178-3 Digital Marking Requirements for Completed Products Intended to be Sold*

OTHER DOCUMENTS

A-SP-ELMF520-02-0	*Manufacturing Systems Assessment Procedure - Checklist for Supplier Certification*
A-SP-7665345-00-0	*Supplier Quality Survey - Metals Fabrication*
A-SP-7665345-01-0	*Preliminary Purchasing Survey*
A-SP-7665345-02-0	*General Information*
A-SP-7665345-03-0	*Quality Survey - General*
A-SP-7665345-04-0	*Castings Quality Survey*
A-SP-7665345-05-0	*Metal Plating/Conversion Coating*
A-SP-7665345-06-0	*Organic Coating Quality Survey*
A-SP-7665345-07-0	*Plastics Quality Survey*
UL Subject 764	*Wiring Harness Follow-up and Inspection Program*
	Purchasing Policy and Procedures Manual

Copies of Digital standards, manuals, and specifications are available from:

Standards and Methods Control
VTX SMC, CTS1-2-1/D4, DTN: 234-4423, JOKUR::SMC

The *Purchasing Policy and Procedures Manual* is available from Corporate Purchasing at CFO1-1/M33, DTN: 251-1509.

Copies of UL documents may be obtained from Underwriters Laboratories, Publications Stock, 33 Pfingsten Road, Northbrook IL 60062, USA. Telephone (312)272-8800 Ext 2612 or 2622.

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